

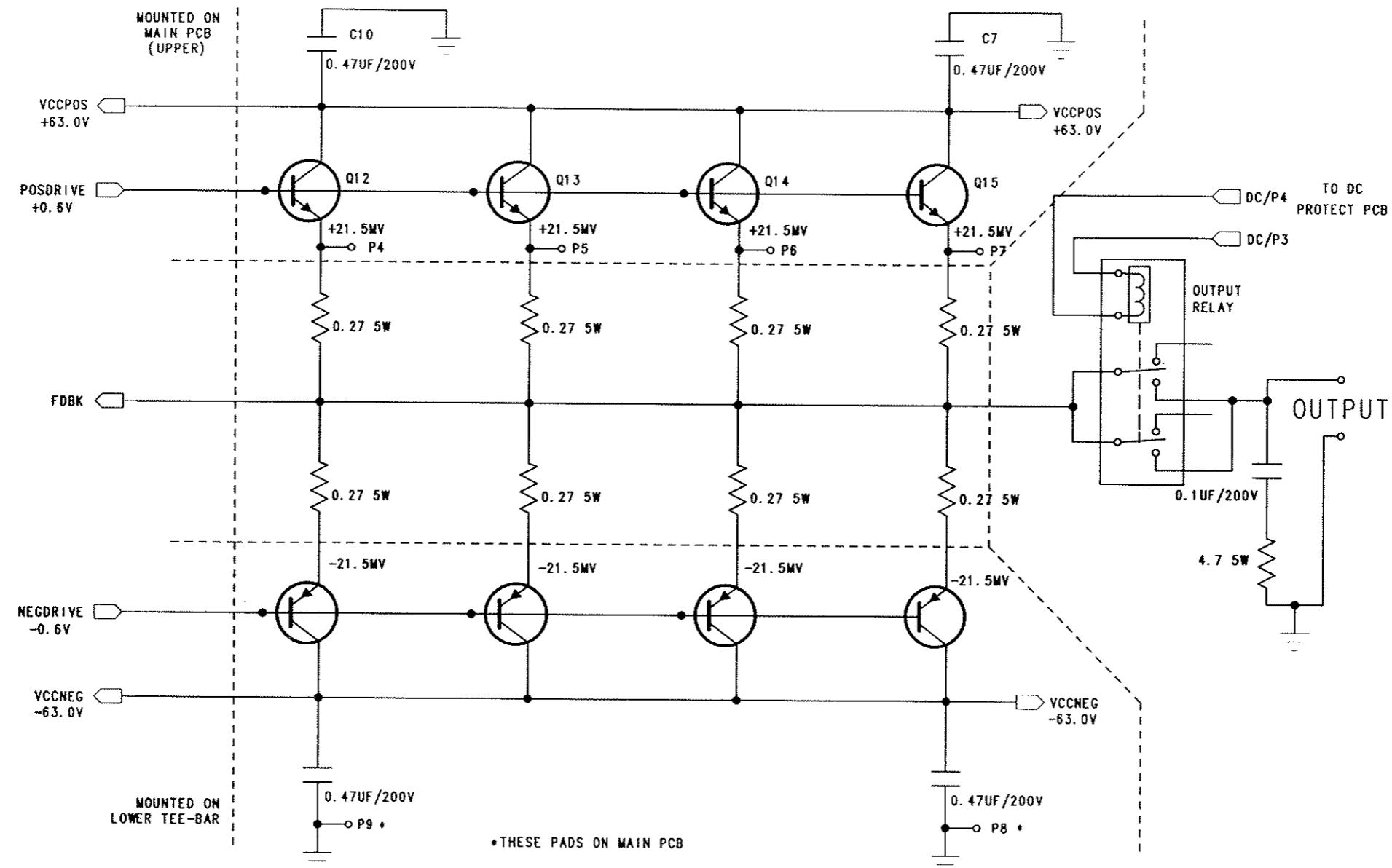
COMPANY: CLASSE AUDIO INC.

TITLE: DR-15 POWER AMPLIFIER

DESC: MAIN PCB

DRAWING NO: 5011LR2

DRAWN: DJR DATE: FEB. 25/91. SHEET: 1 OF 6



COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15 POWER AMPLIFIER		
DESC:	OUTPUT STAGE		
DRAWING NO:	DR-15-2		
DRAWN:	DJR	DATE:	FEB. 25/91. SHEET: 2 OF 6

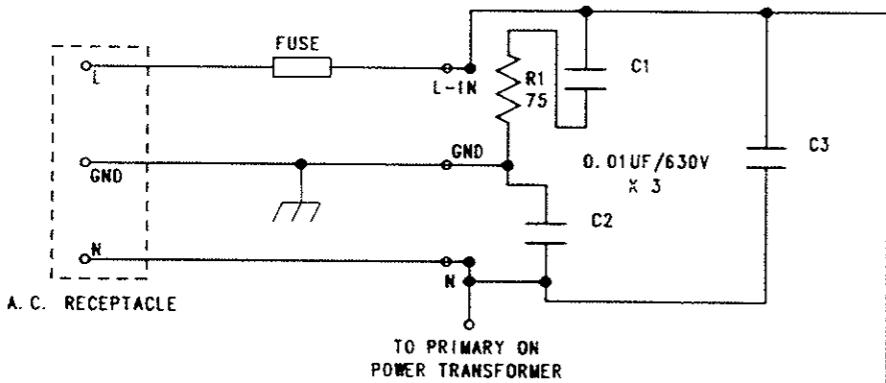
FUSE VALUES:

DR-15:

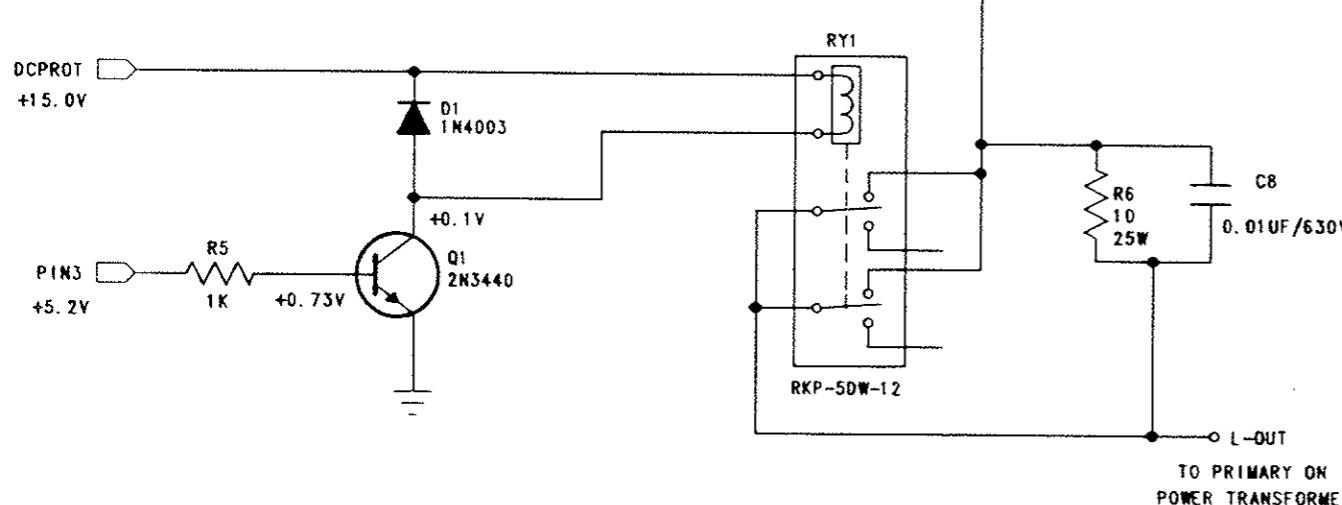
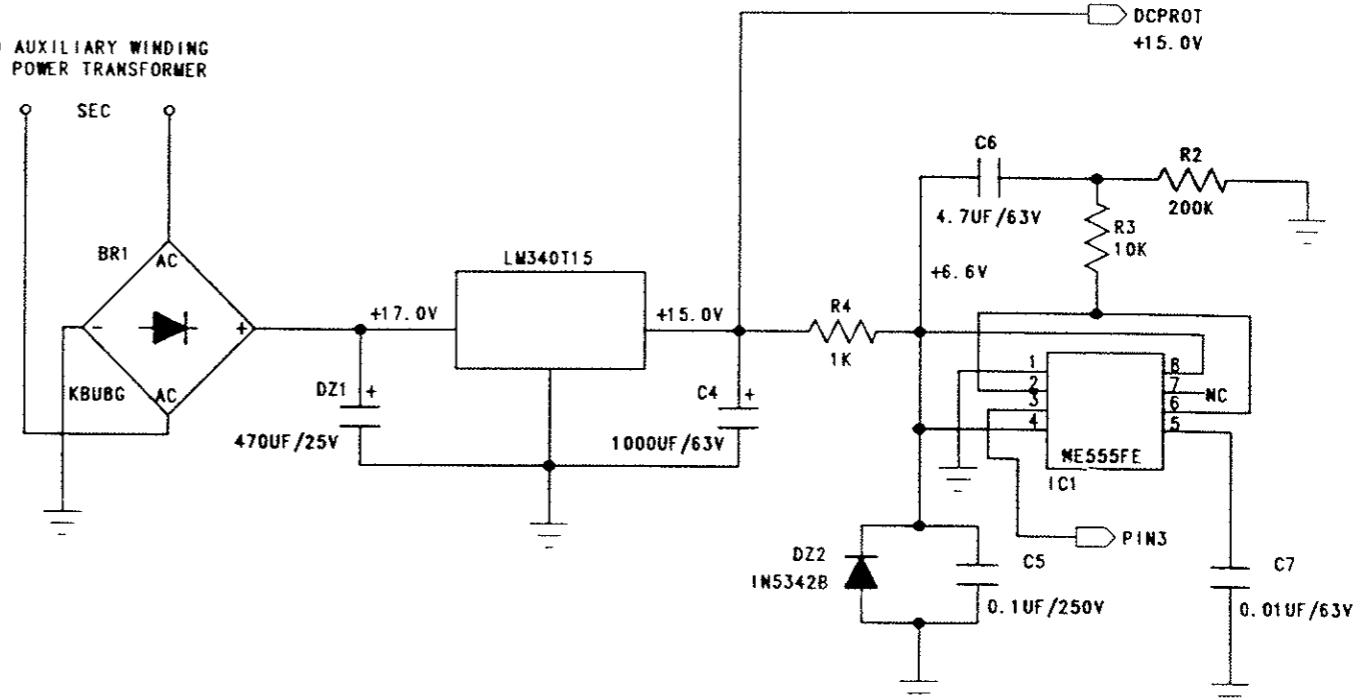
100-120VAC: 8 AMP FAST-BLO  
220-240VAC: 4 AMP FAST-BLO

DR-25:

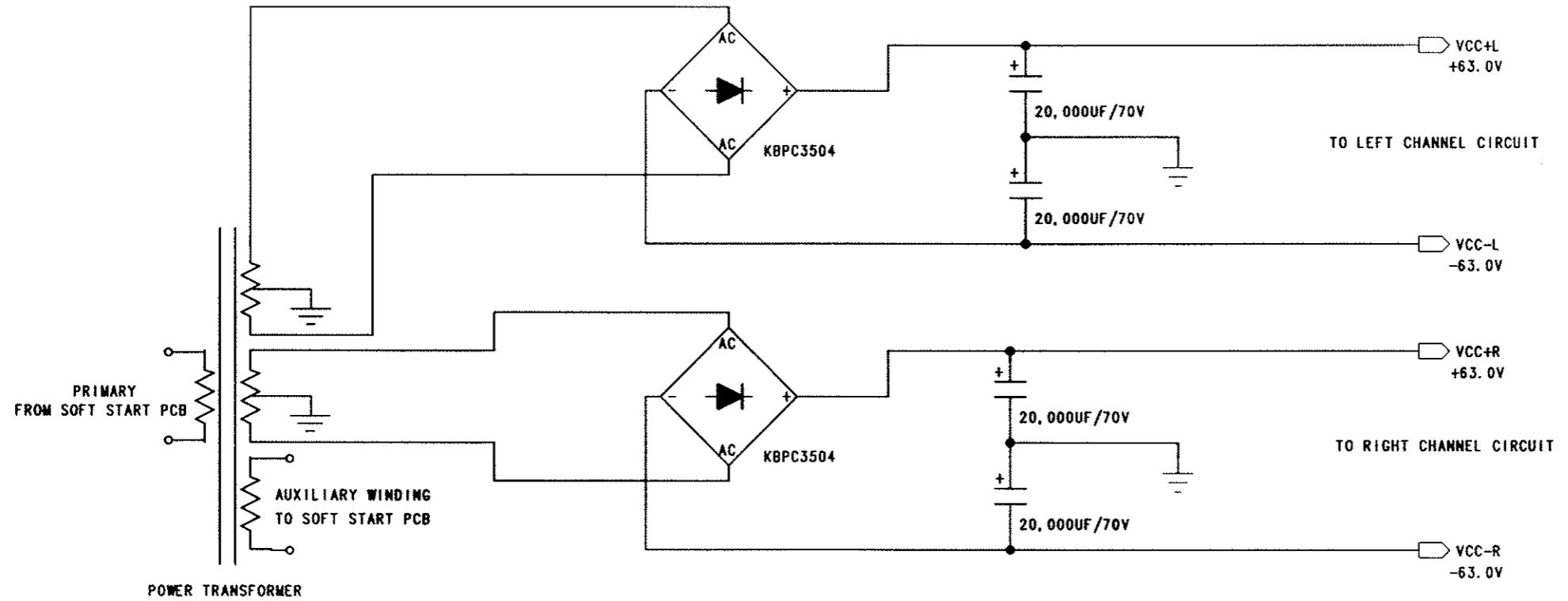
100-120VAC: 12 AMP FAST-BLO  
220-240VAC: 6 AMP FAST-BLO



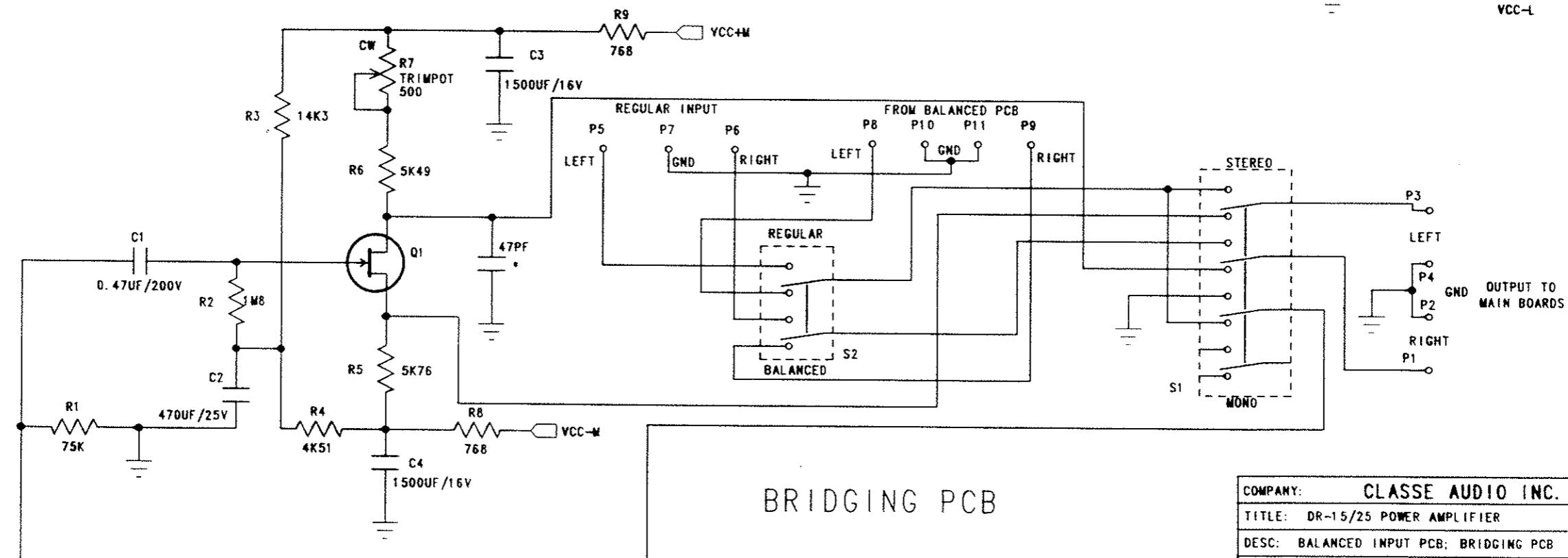
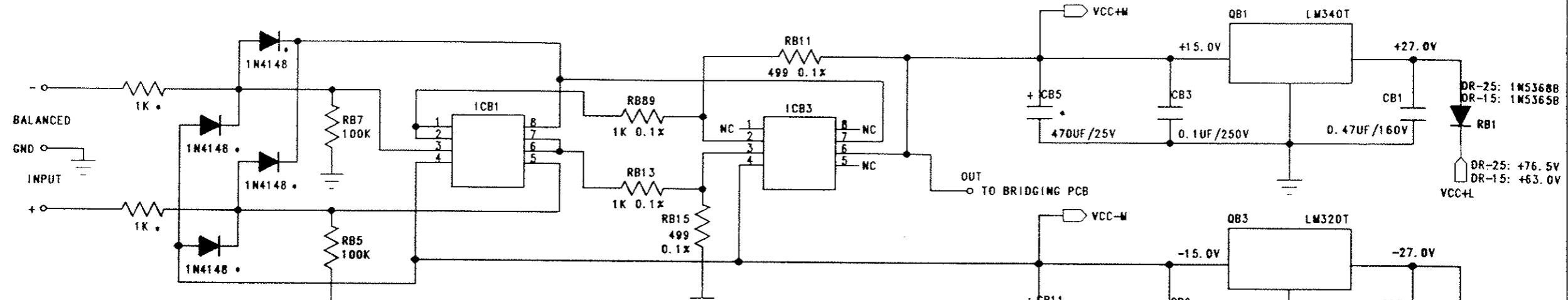
TO AUXILIARY WINDING  
ON POWER TRANSFORMER



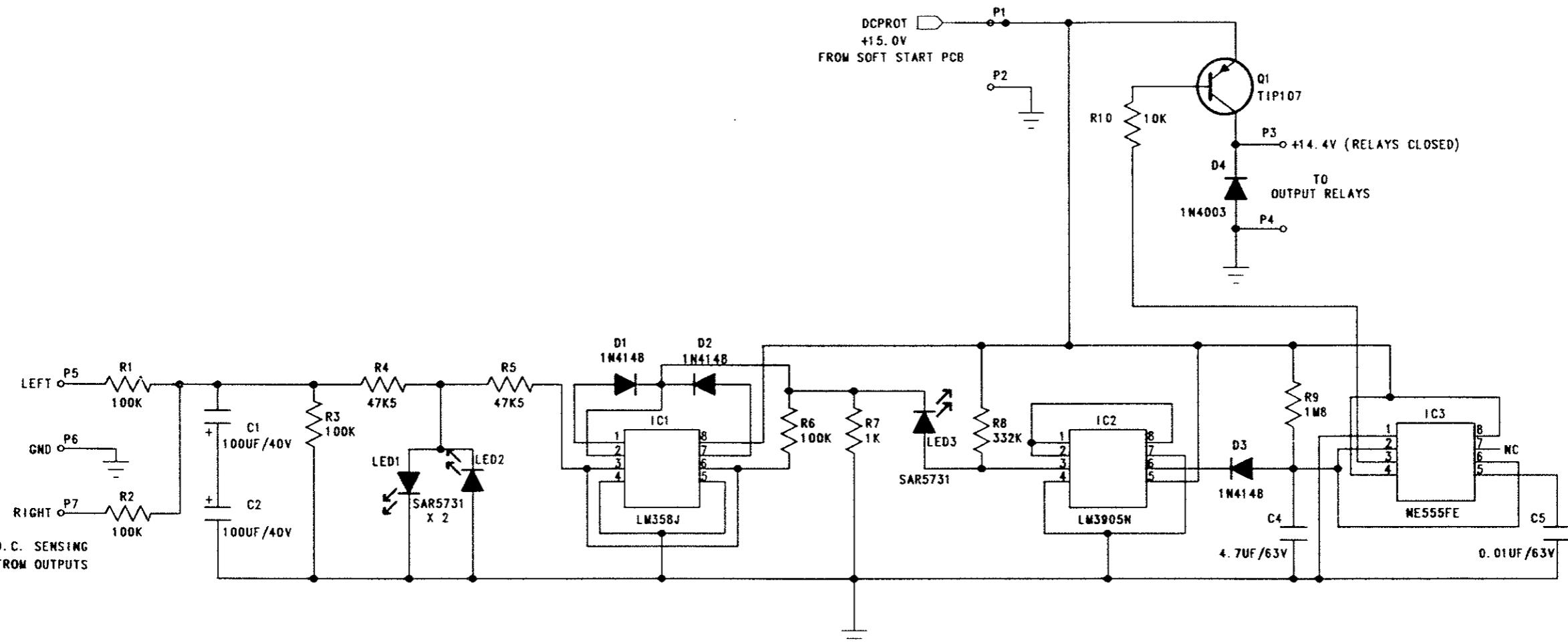
COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15/25 POWER AMPLIFIER		
DESC:	SOFT START		
DRAWING NO:	DR-15/25-7R0		
DRAWN:	DJR	DATE:	FEB. 20/91
SHEET:	3 OF 6		



COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15 POWER AMPLIFIER		
DESC:	MAIN POWER SUPPLY		
DRAWING NO:	DR-15-4		
DRAWN:	DJR	DATE:	FEB. 20/91 SHEET: 4 OF 6



COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15/25 POWER AMPLIFIER		
DESC:	BALANCED INPUT PCB; BRIDGING PCB		
DRAWING NO:	DR-15/25-5		
DRAWN:	DJR	DATE:	FEB. 21/91 SHEET: 5 OF 6



COMPANY:	CLASSE AUDIO INC.		
TITLE:	DR-15/25 POWER AMPLIFIER		
DESC:	D.C. PROTECTION		
DRAWING NO:	50260R1		
DRAWN:	DJR	DATE:	FEB. 25/91. SHEET: 6 OF 6

# "BIAS FOR OLD MODELS"

DR 9-8  $\Rightarrow$  18

DR 10-M10  $\Rightarrow$  21

DR 15-25 - 1/5 1000 - 700  $\Rightarrow$  22

Chasseé 70  $\Rightarrow$  21

FOR ALL MODELS 8 IF THE PRE-DRIVER  
IS MOUNTED ON  
HEAT SINK USE THE  
TOP CORNER TO  
FINAL TEST.  
( TO SET BIAS + OFFSET )

DR-15/25 PRE-TEST PROCEDURE

A) MODULE:

VISUAL CHECK

- 1) Solder on O/P devices.
- 2) Screws on O/P devices. With lockwashers and tightened.  
\_\_\_\_\_ All nuts are regular #6 except bottom of DR-25.

- 3) Screws on T-bars. With #10 int.tooth washer and tightened.

- 4) .27ohm power resistor : Value.

\_\_\_\_\_ Solder join.

\_\_\_\_\_ Number facing front.

- 5) Screws secure for middle board. #6 lockwashers (DR-25 only).

- 6) Wiring.

- 7) Top and side of T-bar are clean.

- 8) Components on board ( polarity of caps, value...etc ).

ELECTRICAL CHECK

- 1) Turn bias trimpot to Min.

- 2) Connect module to one (1) side of pre-tested base.

- 3) Bypass O/P relay with a jumper. Turn unit on. Turn variac slowly up. Observe signal.

- 4) Remove signal.

- 5) Set offset <5mv.

- 6) Adjust bias. Approx. 74ma/device ( 20mv across .27ohm res; Max different = 6mv )

- 7) Apply signal from FG. Adjust FG level to get Max output.

- 8) Check module under 8ohm, 4ohm load with squarewave at 10hz, 1Khz, 10Khz.

- 9) Turn off test unit. Disconnect all connectors and mark "TESTED" on heatsink.

B) BASE:

VISUAL CHECK

- 1) Check all components on 50250r1 ( bridging ), 50260r1 ( DC detector ), DR-9 7r0 ( soft start ), DR-9 8R1 ( balanced ) boards and screws secure them (with #6 lockwashers). Check wiring to those boards.

- 2) Back plate:  
\_\_\_\_\_ Handle ( Int.tooth washers and tightened )

\_\_\_\_\_ Tie wrap on left input cable.

- \_\_\_\_\_ Output bolts (shoulder washer from outside in, a shoulder washer from inside out, 1/2" flat washer, 1/2" int. tooth washer, then 1/2" nut).

\_\_\_\_\_ Cap + Resistor.

\_\_\_\_\_ AC wiring

\_\_\_\_\_ Fuseholder.

\_\_\_\_\_ Output connections.

- 3) All screws on bottom are tightened and 1/4" painted flat washer on Xfmr bolt.

- 4) Screws for caps' clamps ( with #10 int.tooth washers and tightened ).

- 5) Check value and polarity of main power supply caps ( 20,000uf/70v for DR-15 and 30,000uf/80v for DR-25 ), and tighten all screws on them.

- 6) Rectify bridges : Value ( A3502 )

- \_\_ Polarity ( +ve facing front ).
- \_\_ Wiring ( red for +ve; blue for -ve ).
- 7) Power switch : \_\_ Cap
- \_\_ Wiring .
- 8) Xfmr and its wiring .
- 9) Set level of regular input signal at 2v rms, 1khz, sinewave .
- 10) Set OSC:
  - \* Time base : .2ms
  - \* Volt/div : .5v/div ( with \*10 probes ); AC
  - \* Trigger : CH1
  - \* Vertical mode : BOTH ; CHOP

#### ELECTRICAL CHECK

- 1) Insert fuse ( all fuses are fas-blo ) :
  - 12a/250v for 100v/120v DR-25
  - 6a/250v for 220v/240v DR-25
  - 8a/250v for 100v/120v DR-15
  - 4a/250v for 220v/240v DR-15
- 2) Set base at MONO/REGULAR. Feed single ended signal to left input. Turn variac to 5VAC, check rail and polarity of supply to DR-9 8RI board. Connect scope to left and right coax cables.
- 3) Turn variac to line voltage. Check :
  - \* Rails Approx. +/- 66.5 vdc for DR-15; 80 vdc for DR-25
  - \* Aux supply 17.5vdc before reg'r; 15vdc after reg'r.
  - \* Supply to 50250R1: Approx. +/- 12.9vdc.
  - \* On DR-9 8RI board :
    - \_\_ After zener diodes approx. +/- 30v 33V
    - \_\_ After regulators approx. +/- 15v
    - \_\_ O/P offset of TL072 <= /10/mv
    - \_\_ O/P offset of OP27 <= /10/mv
- 4) Turn base off and then turn it on with full line voltage. Count 2 seconds for soft start relay to close and approx 10 seconds for O/P relays to close. Signals should appear out of phase. Check clipping of signals. Adjust level of the right channel by the trimpot on 50250R1 PCB.
- 5) Feed balanced signal to balanced input of left channel, check output signals. Switch to STEREO. Feed balanced signal to right input; Check left and right; Check phase. Compare level of the two (balanced and regular); should be equal.
- 6) Check DC detector CCT by applying DC ( +ve and -ve ) to input of 6RO board one channel at the time.
- 7) Check contacts of O/P relays.
- 10) Turn switch and variac off. Pull out line cord. Then discharge the main supply caps with 10ohm/25w resistor. Discharge caps again with a short.
- 11) Mark "TESTED" on base.

Date: Jan 15th 1991